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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/200,631	11/30/1998	CURTIS L. ASHTON	1569/1570	9598

22193 7590 04/02/2004

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EXAMINER	
ENG, GEORGE	
ART UNIT	**PAPER NUMBER**
2643	24

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/200,631	ASHTON ET AL.	
	Examiner	Art Unit	
	George Eng	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-11 and 13-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-11 and 13-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action is in response to amendment filed 1/21/2004 (paper no. 23).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 4-11 and 13-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bigham et al. (US PAT. 5,740, 075 hereinafter Bigham) in view of Hawley (US PAT. 5,523,868).

Regarding claim 1, Bigham discloses a system for powering a fiber optic communication network, which transmits communication data between a telecommunications service provider and a remote user device as shown in figure 3. The system comprises an optical network node (ONU 1210) for converting the communication data from a digital optical state to a digital electrical state (col. 21 lines 25-23), a fiber optic communication medium (1190) configured to transfer the communication data between the telecommunications service provider (1333), and the optical network node (col. 20 lines 41-42 and col. 26 lines 31-46), a power source (1211) and a battery reserve power configured to supply an electrical supply voltage to power the digital subscriber line access multiplexer, and an electrical conducting medium (1215) configured to conduct the electrical supply voltage and the communication data from the optical network node to a network interface device in electrical communication with the remote user device (col. 21 lines 8-13 and col. 26 lines 55-59). Bigham differs from the claimed invention in not specifically teaching the power source comprising an alarm system configured to monitor the operation of the electrical power source and provide power source operation information. However, Hawley teaches a method for monitoring power loss in a telecommunication system in order to more quickly and more efficiently determine and repair a loss of power, wherein a power source comprises an alarm system including a power loss detection circuitry for monitoring an operation of an electrical power and a logic to transmit a message related to operation information of electrical power to a telecommunication service provider, i.e., a telephone company, to indicate a power failure upon detection of the operation of the electrical power loss (col. 2 line 50 through col.5 line 25). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Bigham in having the alarm system configured to

monitor the operation of the electrical power source and provide power source operation information, as per teaching of Hawley, because it makes more quickly and more efficiently determine and repair a loss of power so that it provide reliable power loss detection and reporting.

Regarding claims 4-7, Bigham disclose that the power source (1211) is located proximate to the optical network node (1210), which is remote from the optical network node and supplies power to plurality of the optical network node (figure 3B). Note while it is notoriously well known in the art that power source is capable or shifting location due to the design purposed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Bigham in having power source (1211) located proximate to telecommunications service provider or, as well as a digital loop carrier based upon the design purposes.

Regarding claims 8-10, Bigham teaches the remote user device comprising telephone (1219), a computer (1217), and a television (figure 3B).

Regarding claims 11 and 17, Hawley teaches the power supply comprising a primary power source for providing power during normal operation and a secondary power source for providing power when the primary power source is inoperable (col. 4 line 1 through col. 5 line 2), wherein the secondary power source is obviously recognized in having a plurality of rectifiers, a plurality of converters, a plurality of current limiters, and a plurality of batteries configured to supply the DC voltage.

Regarding claim 13, Hawley teaches to connect the alarm system in the electrical power source to an optical network node (18, figure 1) with conducting mediums (20, figure 1) to report power source operation information (col. 3 lines 13-21 and col. 4 line 62 through col. 5 line 10).

Regarding claim 14, the limitations of the claim are rejected as the same reasons set forth in claim 1.

Regarding claim 15, Bigham teaches the optical network node comprising an optical network unit (col. 20 line 40).

Regarding claim 16, Bigham discloses the system comprising the optical network (ONU 1210) functioning as a digital subscriber line access multiplexer for converting the communication data from a digital optical state to a digital electrical state (col. 21 lines 25-23).

Regarding claims 18-19, Bigham discloses an electrical conducting medium conducting the electrical supply voltage and the communication data from the optical network node and the remote user device, and a network interface device (1217) connected between the optical network and the remote user device (figure 3B).

Regarding claims 20-21, Bigham teaches to transfer digital communication data between the telecommunications service provider and an optical network unit, i.e., a digital subscriber line access multiplexer (col. 21 lines 25-23).

Regarding claims 22-23, Hawley teaches to transmit alarm signal for specifying pertinent data regarding the power loss (col. 4 lines 61-62) so that the alarm signal obviously comprises transmitting power level and operational data to the telecommunications service provider.

Regarding claim 24, the limitations of the claim are rejected as the same reasons set forth in claims 11 and 17.

Regarding claims 25-26, the limitations of the claims are rejected as the same reasons set forth in claims 18-19.

Regarding claim 27, Hawley teaches the power source information in order to switch in battery backup power supplies (col. 4 line 53 through col. 5 line 10).

Regarding claim 28, Hawley teaches the power supply being derived from a power company (col. 1 lines 42-49) so that the electrical power supply obviously includes AC power source, a rectifier's voltage, a converter's voltage, and a current limiter's current. In addition, Hawley teaches to monitor the operation of the electrical power supply, i.e., a loss of power, for generating an alarm to notify a service provider, i.e., a telephone company, (col. 3 lines 51-67) so that one skill in the art would recognize the monitoring information selected from a group of information about the AC power source, information about the rectifier's voltage, information about the converter's voltage, and information about the current limiter's current.

4. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bigham et al. (US PAT. 5,740, 075 hereinafter Bigham) in view of Hawley (US PAT. 5,523,868) as applied in claims above, and further in view of Mercadante et al. (US PAT. 5,889,465 hereinafter Mercadante).

Regarding claim 29, the combination of Bigham and Hawley differs from the claimed invention in not specifically teaching to transmit the electrical power source information from the alarm system to the telecommunication service provider via a medium other than the fiber optic communication medium. However, Mercadante teaches a power quality reporting system using a telephone communications link, other than the fiber optic communication medium, to

notify a central location for power disruption in order to provide a reliable, flexible and conditioned power to remote location (col. 4 line 49 through col. 6 line 54). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Bigham and Hawley in transmitting the electrical power source information from the alarm system to the telecommunication service provider via a medium other than the fiber optic communication medium, as per teaching of Mercadante, in order to provide a reliable, flexible and conditioned power to remote location.

Response to Arguments

5. Applicant's arguments filed 1/21/2004 (paper no. 23) have been fully considered but they are not persuasive.

In response to applicant's argument that neither Bigham nor Hawley teaches an alarm system configured to monitor the operation of the electrical power source and transmit electrical power source operation information to the telecommunications service provider, Hawley clearly teaches an electrical power supply (22, figure 2) for providing power to the optical network node, wherein the electrical power supply further comprises a detector circuitry for monitoring the operation of the electrical power supply and providing electrical power source information, i.e., an alarm message specifying pertinent data regarding the power loss, to a remote maintenance center, i.e., telecommunications service provider (col. 3 line 23 through col. 5 line 10). Thus, one skill in the art would recognize Hawley teaching the detector circuitry configured to monitor the operation of the electrical power source and transmit power source operation to the telecommunications service provider.

In response to applicant's argument that neither Bigham nor Hawley teaches the monitoring information selected from a group consisting of information about the AC power source, information about the rectifier's voltage, information about the converter's voltage, and information about the current limiter's current, Hawley clearly teaches the power supply being derived from a power company (col. 1 lines 42-49) so that the electrical power supply obviously includes AC power source, a rectifier's voltage, a converter's voltage, and a current limiter's current. In addition, Hawley teaches to monitor the operation of the electrical power supply, i.e., a loss of power, for generating an alarm to notify a service provider, i.e., a telephone company, (col. 3 lines 51-67) so that one skill in the art would recognize the monitoring information selected from a group of information about the AC power source, information about the rectifier's voltage, information about the converter's voltage, and information about the current limiter's current.

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lau et al. (US PAT. 5,550,476) discloses a fault sensor device for detecting and distinguishing abnormal current and voltage event and transmitting current and voltage fault information from power transmission and distribution lines to a control center (col. 3 line 1

through col. 4 line 12). Kight et al. (US PAT. 5,355,238) discloses a method for monitoring and demarcation of synchronous optical networks (abstract).

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any response to this final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks

Washington D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

George Eng
Primary Examiner
Art Unit 2643